IN THE CLAIMS

The following is a complete listing of the claims, and replaces all earlier versions and listings.

1.   (currently amended)   A method of monitoring performance of an interactive voice response (IVR) system used by an automated call processing center, a call from a caller to the call processing centering including an initial IVR portion of the call, and, at the caller's option, an agent-caller dialog portion of the call, said method comprising:

generating logs of call activity within the IVR system for a plurality of calls;

determining, from the logs of call activity, routing information related to the plurality of calls within the IVR system, including routing of calls out of the IVR system to an agent;

noting, in the logs of call activity, predetermined significant activity in agent-caller dialog portions of calls routed to an agent;

determining at least one <u>effectiveness</u> quantity ~~correlated~~ <u>by comparing a reason for a call implied from the routing information related to the call</u> to a true intention of <u>the caller determined from the agent-caller dialog portion of the</u> callers ~~utilizing the IVR system~~;

generating a performance model of the IVR system from the logs of call activity; and

analyzing the logs of call activity, the determined routing information, the at least one ~~determined~~ <u>effectiveness</u> quantity ~~correlated to the true intention of the callers~~, and the performance model to determine a performance value of the IVR system, wherein the performance value is used to monitor the IVR system.

2.   (currently amended)   A method according to Claim 1, wherein ~~said step of~~ determining ~~at least one quantity~~ <u>a true intention of a caller</u> includes asking a caller about his/her true intention for calling the call processing center.

3.   (original)   A method according to Claim 1, wherein said step of determining includes obtaining information from an agent to determine a true intention of a caller.

4.   (original)   A method according to Claim 1, wherein said method is performed on an ongoing basis.

5.   (currently amended)   A method according to Claim 1, wherein the at least one ~~determined~~ effectiveness quantity correlates to a routing accuracy of the IVR system.

6.   (original)   A method according to Claim 1, further comprising the step of generating an alarm when the performance value of the IVR system is determined to be below a predetermined value.

7.   (currently amended)   An apparatus for monitoring performance of an interactive voice response (IVR) system used by an automated call processing center, a call from a caller to the call processing centering including an initial IVR portion of the call, and, at the caller's option, an agent-caller dialog portion of the call, said apparatus comprising:

          means for generating logs of call activity within the IVR system for a plurality of calls;

          means for determining, from the logs of call activity, routing information related to the plurality of calls within the IVR system, including routing of calls out of the IVR system to an agent;

          means for noting, in the logs of call activity, predetermined significant activity in agent-caller dialog portions of calls routed to an agent;

          means for determining at least one effectiveness quantity ~~correlated~~ by comparing a reason for a call implied from the routing information related to the call to a true intention of

- 3 -

the caller determined from the agent-caller dialog portion of the callers utilizing the IVR system;

means for generating a performance model of the IVR system from the logs of call activity; and

means for analyzing the logs of call activity, the determined routing information, the at least one determined effectiveness quantity correlated to the true intention of the callers, and the performance model to determine a performance value of the IVR system, wherein the performance value is used to monitor the IVR system.

8.   (currently amended)   An apparatus according to Claim 7, wherein said means for determining at least one effectiveness quantity asks a caller about his/her true intention for calling the call processing center.

9.   (currently amended)   An apparatus according to Claim 7, wherein said means for determining at least one effectiveness quantity obtains information from an agent to determine a true intention of a caller.

10.   (original)   An apparatus according to Claim 7, wherein said apparatus operates on an ongoing basis.

11.   (currently amended)   An apparatus according to Claim 7, wherein the at least one measured effectiveness quantity correlates to a routing accuracy of the IVR system.

12.   (original)   An apparatus according to Claim 7, further comprising means for generating an alarm when the performance value of the IVR system is determined to be below a predetermined value.

13.   (currently amended)   An apparatus for monitoring performance of an interactive voice response (IVR) system used by an automated call processing center, a call from

- 4 -

a caller to the call processing centering including an initial IVR portion of the call, and, at the caller's option, an agent-caller dialog portion of the call, said apparatus comprising:

a log generation unit adapted to generate logs of call activity within the IVR system for a plurality of calls;

a routing information determination unit adapted to determine, from the logs of call activity, routing information related to the plurality of calls within the IVR system, including routing of calls out of the IVR system to an agent;

a significant activity notation unit adapted to note, in the logs of call activity, predetermined significant activity in agent-caller dialog portions of calls routed to an agent;

an ~~true intention~~ effectiveness determination unit adapted to determine at least one effectiveness quantity ~~correlated~~ by comparing a reason for a call implied from the routing information related to the call to a true intention of the caller determined from the agent-caller dialog portion of the callers ~~utilizing the IVR system~~;

a performance model generation unit adapted to generate a performance model of the IVR system from the logs of call activity; and

an analysis unit adapted to analyze the logs of call activity, the determined routing information, the at least one ~~determined~~ effectiveness quantity ~~correlated to the true intention of the callers~~, and the performance model to determine a performance value of the IVR system, wherein the performance value is used to monitor the IVR system.

14.   (currently amended)   A system for monitoring performance of an interactive voice response (IVR) system used by an automated call processing center, a call from a caller to the call processing centering including an initial IVR portion of the call, and, at the caller's option, an agent-caller dialog portion of the call, said system being operable to:

generate logs of call activity within the IVR system for a plurality of calls;

determine, from the logs of call activity, routing information related to the plurality of calls within the IVR system, including routing of calls out of the IVR system to an agent;

- 5 -

note, in the logs of call activity, predetermined significant activity in agent-caller dialog portions of calls routed to an agent;

determine at least one <u>effectiveness</u> quantity ~~correlated~~ <u>by comparing a reason for a call implied from the routing information related to the call</u> to a true intention of <u>the caller determined from the agent-caller dialog portion of the</u> callers ~~utilizing the IVR system~~;

generate a performance model of the IVR system from the logs of call activity; and

analyze the logs of call activity, the determined routing information, the at least one <u>effectiveness</u> quantity ~~correlated to the true intention of the callers~~, and the performance model to determine a performance value of the IVR system, wherein the performance value is used to monitor the IVR system.

15.   (original)   A system according to Claim 14, wherein a true intention of a caller is determined by asking the caller of his/her reason for calling the call processing center.

16.   (original)   A system according to Claim 14, wherein a true intention of a caller is determined from information obtained from an agent.

17.   (original)   A system according to Claim 14, wherein said system operates on an ongoing basis.

18.   (currently amended)   A system according to Claim 14, wherein the at least one <u>effectiveness</u> quantity correlate<u>s</u> to a routing accuracy of the IVR system.

19.   (original)   A system according to Claim 14, wherein said system further operates to generate an alarm when the performance value of the IVR system is determined to be below a predetermined value.

- 6 -

20.   (currently amended)   A computer program product embodying a program for implementing a method of monitoring performance of an interactive voice response (IVR) system used by an automated call processing center, a call from a caller to the call processing centering including an initial IVR portion of the call, and, at the caller's option, an agent-caller dialog portion of the call, said program product comprising:

        code for generating logs of call activity within the IVR system for a plurality of calls;

        code for determining, from the logs of call activity, routing information related to the plurality of calls within the IVR system, including routing of calls out of the IVR system to an agent;

        code for noting, in the logs of call activity, predetermined significant activity in agent-caller dialog portions of calls routed to an agent;

        code for determining at least one <u>effectiveness</u> quantity ~~correlated~~ <u>by comparing a reason for a call implied from the routing information related to the call</u> to a true intention of <u>the caller determined from the agent-caller dialog portion of the</u> callers ~~utilizing the IVR system~~;

        code for generating a performance model of the IVR system from the logs of call activity; and

        code for analyzing the logs of call activity, the determined routing information, the at least one ~~determined~~ <u>effectiveness</u> quantity ~~correlated to the true intention of the callers~~, and the performance model to determine a performance value of the IVR system, wherein the performance value is used to monitor the IVR system.

21.   (original)   A computer program product according to Claim 20, wherein a true intention of a caller is determined by asking the caller of his/her reason for calling the call processing center.

22.   (original)   A computer program product according to Claim 20, wherein a true intention of a caller is determined from information obtained from an agent.

- 7 -

23.   (original)   A computer program product according to Claim 20, wherein the method is performed on an ongoing basis.

24.   (currently amended)   A computer program product according to Claim 20, wherein the at least one ~~determined~~ effectiveness quantity correlates to a routing accuracy of the IVR system.

25.   (original)   A computer program product according to Claim 20, further comprising code for generating an alarm when the performance value of the IVR system is determined to be below a predetermined value.

26.   (currently amended)   A method of monitoring performance of an automated response system used by an automated contact processing center, a contact from a contactor to the contact processing centering including an initial automated portion of the contact, and, at the contactor's option, an agent-contactor dialog portion of the contact, said method comprising:

generating logs of contact activity within the automated response system for a plurality of contacts;

determining, from the logs of contact activity, routing information related to the plurality of contacts within the automated response system, including routing of contacts out of the automated response system to an agent;

noting, in the logs of contact activity, predetermined significant activity in agent-contactor dialog portions of contacts routed to an agent;

determining at least one effectiveness quantity ~~correlated~~ by comparing a reason for a contact implied from the routing information related to the contact to a true intention of the contactor determined from the agent-caller dialog portion of the contact~~ors utilizing the automated response system~~;

- 8 -

generating a performance model of the automated response system from the logs of contact activity; and

analyzing the logs of contact activity, the determined routing information, the at least one ~~determined~~ effectiveness quantity ~~correlated to the true intention of the contactors~~, and the performance model to determine a performance value of the automated response system, wherein the performance value is used to monitor the automated response system.

27. (currently amended) An apparatus for monitoring performance of an automated response system used by an automated contact processing center, a contact from a contactor to the contact processing centering including an initial automated portion of the contact, and, at the contactor's option, an agent-contactor dialog portion of the contact, said apparatus comprising:

means for generating logs of contact activity within the automated response system for a plurality of contacts;

means for determining, from the logs of contact activity, routing information related to the plurality of contacts within the automated response system, including routing of contacts out of the automated response system to an agent;

means for noting, in the logs of contact activity, predetermined significant activity in agent-contactor dialog portions of contacts routed to an agent;

means for determining at least one effectiveness quantity ~~correlated~~ by comparing a reason for a contact implied from the routing information related to the contact to a true intention the contactor determined from the agent-caller dialog portion of the of contact~~ors~~ ~~utilizing the automated response system~~;

means for generating a performance model of the automated response system from the logs of contact activity; and.

means for analyzing the logs of contact activity, the determined routing information, the at least one ~~determined~~ effectiveness quantity ~~correlated to the true intention of the contactors~~, and the performance model to determine a performance value of the automated

- 9 -

response system, wherein the performance value is used to monitor the automated response system.

28. (currently amended) An apparatus for monitoring performance of an automated response system used by an automated contact processing center, a contact from a contactor to the contact processing centering including an initial automated portion of the contact, and, at the contactor's option, an agent-contactor dialog portion of the contact, said apparatus comprising:

a log generation unit adapted to generate logs of contact activity within the automated response system for a plurality of contacts;

a routing information determination unit adapted to determine, from the logs of contact activity, routing information related to the plurality of contacts within the automated response system, including routing of contacts out of the automated response system to an agent;

a significant activity notation unit adapted to note, in the logs of contact activity, predetermined significant activity in agent-contactor dialog portions of contacts routed to an agent;

an ~~true-intention~~ effectiveness determination unit adapted to determine at least one effectiveness quantity ~~correlated~~ by comparing a reason for a contact implied from the routing information related to the contact to a true intention of the contactor determined from the agent-caller dialog portion of the contact~~ors utilizing the automated response system~~;

a performance model generation unit adapted to generate a performance model of the automated response system from the logs of contact activity; and

an analysis unit adapted to analyze the logs of contact activity, the determined routing information, the at least one ~~determined~~ effectiveness quantity ~~correlated to the true intention of the contactors~~, and the performance model to determine a performance value of the automated response system, wherein the performance value is used to monitor the automated response system.

- 10 -

29.   (currently amended)   A system for monitoring performance of an automated response system used by an automated response processing center, a contact from a contactor to the contact processing centering including an initial automated portion of the contact, and, at the contactor's option, an agent-contactor dialog portion of the contact, said system being operable to:

generate logs of contact activity within the automated response system for a plurality of contacts;

determine, from the logs of contact activity, routing information related to the plurality of contacts within the automated response system, including routing of contacts out of the automated response system to an agent;

note, in the logs of contact activity, predetermined significant activity in agent-contactor dialog portions of contacts routed to an agent;

determine at least one <u>effectiveness</u> quantity ~~correlated~~ <u>by comparing a reason for a contactor implied from the routing information related to the contact</u> to a true intention of <u>the contactor determined from the agent-caller dialog portion of the</u> contact~~ors utilizing the automated response system~~;

generate a performance model of the automated response system from the logs of contact activity; and

analyze the logs of contact activity, the determined routing information, the at least one <u>effectiveness</u> quantity ~~correlated to the true intention of the contactors~~, and the performance model to determine a performance value of the automated response system, wherein the performance value is used to monitor the automated response system.

30.   (currently amended)   A computer program product embodying a program for implementing a method of monitoring performance of an automated response system used by an automated contact processing center, a contact from a contactor to the contact processing centering including an initial automated portion of the contact, and, at the contactor's option, an agent-contactor dialog portion of the contact, said program product comprising:

- 11 -

code for generating logs of contact activity within the automated response system for a plurality of contacts;

code for determining, from the logs of contact activity, routing information related to the plurality of contacts within the automated response system, including routing of contacts out of the automated response system to an agent;

code for noting, in the logs of contact activity, predetermined significant activity in agent-contactor dialog portions of contacts routed to an agent;

code for determining at least one <u>effectiveness</u> quantity ~~correlated~~ <u>by comparing a reason for a contact implied from the routing information related to the contact</u> to a true intention of <u>the contactor determined from the agent-caller dialog portion of the</u> ~~contactors utilizing the automated response system~~;

code for generating a performance model of the automated response system from the logs of contact activity; and

code for analyzing the logs of contact activity, the determined routing information, the at least one ~~determined~~ <u>effectiveness</u> quantity ~~correlated to the true intention of the contactors~~, and the performance model to determine a performance value of the automated response system, wherein the performance value is used to monitor the automated response system.

- 12 -